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(54) Title: USE SINGLE NUCLEOTIDE POLYMORPHSM IN THE CODING REGION OF THE PORCINE LEPTIN RECEPTOR GENE TO ENHANCE PORK PRODUCTION

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GCACTGTTTGAGCACTTGGAAAGTTAAATAATTATTGTTGGAGACTGCATGTTTTAATCTTAGA
TACTTCCTATTTATGTCTTAGTCAAAATGATTAATTGCTTTTCTATGTGTCTTTTAAATGTCCT
AACA GAA TTT ATT TAT GTG ATA ACT GCA TTT GAC TTG
                  E   F   I   Y   V   I   T   A   F   D   L

GCA TAT CCA ATT ACT CCT TGG AAA TTT AAG TTG TCT TGC ATG CCA
 A   Y   P   I   T   P   W   K   F   K   L   S   C   M   P

CCA AAT ACA ACA TAT GAC TTC CTC TTG CCT GCT GGA ATC TCA AAG
 P   N   T   T   Y   D   F   L   L   P   A   G   I   S   K

AAC ACT TCA ACT TTG AAT GGA CAT GAT GAG GCA GTT GTT GAA
 N   T   S   T   L   N   G   H   D   E   A   V   V   E

A[T/C]G GAA CTT AAT [T/A][C/T]A  AGT GGT ACC TAC TTA TCA AAC
  M/T    E   L   N      S/I      S   G   T   Y   L   S   N

TTA TCT TCT AAA ACA ACT TTC CAC TGT TGC TTT TGG AGT GAG GAA
 L   S   S   K   T   T   F   H   C   C   F   W   S   E   E

GAT AAA AAC TGC TCT GTA CAT GCA GAC AAC ATT GCA GGG AAG G
 D   K   N   C   S   V   H   A   D   N   I   A   G   K
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(57) Abstract: The instant invention is drawn to the identification and use of information regarding one or more porcine leptin receptor (pLEPR) gene polymorphisms as a marker to identify animals to serve as breeding stock for enhanced pork production. One particular polymorphism of pLEPR gene results in either a methionine or a threonine amino acid residue at position 69 of the protein that the pLEPR genes encodes. The pLEPR gene is located on porcine chromosone 6 and have been shown to be associated with determination of daily feed intake, among other factors.

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